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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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01/607, 196 07/28/03 TANEJA

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023644  
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HM12/0921

EXAMINER

SQUAY, J

ART UNIT

PAPER NUMBER

1658

DATE MAILED:

05/21/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/627,796

Applicant(s)

Taneja

Examiner

Jehanne Souaya

Art Unit

1655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jul 28, 2000
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-45 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other:

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## DETAILED ACTION

### *Election/Restriction*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15, 21-23, and 29-45, drawn to nucleic acid probes directed to human chromosome X and to methods and kits for detecting, identifying, or quantitating human chromosome X in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
  - II. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome Y and to methods and kits for detecting, identifying, or quantitating human chromosome Y in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
  - III. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 1 and to methods and kits for detecting, identifying, or quantitating human chromosome 1 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
  - IV. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 2 and to methods and kits for detecting, identifying, or quantitating human chromosome 2 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.

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- V. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 3 and to methods and kits for detecting, identifying, or quantitating human chromosome 3 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- VI. Claims 1-16, 21-24 and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 4 and to methods and kits for detecting, identifying, or quantitating human chromosome 4 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- VII. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 6 and to methods and kits for detecting, identifying, or quantitating human chromosome 6 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- VIII. Claims 1-15, 17, 21-23, 25, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 7 and to methods and kits for detecting, identifying, or quantitating human chromosome 7 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- IX. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 8 and to methods and kits for detecting, identifying, or quantitating human chromosome 8 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.

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- X. Claims 1-15, 18, 21-23, 26, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 9 and to methods and kits for detecting, identifying, or quantitating human chromosome 9 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XI. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 10 and to methods and kits for detecting, identifying, or quantitating human chromosome 10 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XII. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 11 and to methods and kits for detecting, identifying, or quantitating human chromosome 11 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XIII. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 12 and to methods and kits for detecting, identifying, or quantitating human chromosome 12 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XIV. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 16 and to methods and kits for detecting, identifying, or quantitating human chromosome 16 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.

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- XV. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 17 and to methods and kits for detecting, identifying, or quantitating human chromosome 17 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XVI. Claims 1-15, 21-23, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 18 and to methods and kits for detecting, identifying, or quantitating human chromosome 18 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XVII. Claims 1-15, 19, 21-23, 27, and 29-45, drawn to drawn to nucleic acid probes directed to human chromosome 20 and to methods and kits for detecting, identifying, or quantitating human chromosome 20 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
- XVIII. Claims 1-15, 20-23, and 28-45, drawn to drawn to nucleic acid probes directed to human chromosome pair 13/21 and to methods and kits for detecting, identifying, or quantitating human chromosome pair 13/21 in a sample, classified in class 536, subclass 23.1 and class 435, subclass 6.
2. The inventions are distinct, each from the other because of the following reasons: Each group is directed to nucleic acid sequences that identify or detect a different human chromosome. Each of the sequences are structurally and functionally different from each other. That is structurally, the sequences comprise a different sequences of nucleotide bases, thus resulting in

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unique sequences. Functionally, the sequences are different in that they identify or detect different chromosomes. The methods of each group are also patentably distinct because the method for detecting chromosome X is different from the method of detecting chromosome Y in that the sequences required to detect each chromosome are different. Each chromosome is made up of different nucleic acid sequences that are patentably distinct from each other and require different nucleic acid sequences for their identification or detection.

By statute, “[i]f two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions.” 35 U.S.C. 121. Pursuant to this statute, the rules provide that “[i]f two or more independent and distinct inventions are claimed in a single application, the examiner in his action shall require the applicant... to elect that invention to which his claim shall be restricted.” 37 CFR 1.142 (a). See also 37 CFR 1.141(a).

Nucleotide sequences that detect different chromosomes are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequences are presumed to represent an independent and distinct invention, subject to restriction requirement pursuant to 35 USC 121 and 37 CFR 1.141.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to

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be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II-XVIII, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). Applicant should also indicate the SEQ ID NOS of the probes required for identification of a single chromosome or chromosome pair 13/21.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jehanne Souaya whose telephone number is (703)308-6565. The examiner can normally be reached Monday-Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax phone number for this Group is (703) 305-3014.



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Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

*Jehanne Souaya*

Jehanne Souaya  
Patent examiner

*September 18, 2001*

*W. Gary Jones*

W. Gary Jones  
Supervisory Patent Examiner  
Technology Center 1600

*9/20/01*